CLAIMS

What is claimed is:

1. A method for manufacturing electron emitters by providing pairs of element electrodes, and conductive layers connecting the element electrodes to each other on a substrate, the method comprising:

a step of forming banks surrounding electrode-forming regions for forming the element electrodes and conductive layer-forming regions for forming the conductive layers;

a step of discharging first droplets toward the electrode-forming regions; and

a step of discharging second droplets toward the conductive layer-forming regions.

2. The method for manufacturing electron emitters according to Claim 1, further comprising a step of lyophobing the banks.

3. The method for manufacturing electron emitters according to Claim 1, wherein the banks are formed using a lyophobic material.

4. The method for manufacturing electron emitters according to Claim 1, further comprising a step of lyophilizing at least one of the electrode-forming region and the conductive layer-forming region.

5. An electron emitter manufactured by the method according to Claim 1.

6. An electron emitter comprising:

a substrate;

a pair of element electrodes;

a conductive layer connecting the element electrodes to each other; and

a bank surrounding the element electrodes and the conductive layer,

wherein the element electrodes, the conductive layer, and the bank are disposed on the substrate.

7. An electro-optical device comprising the electron emitter according to Claim 6.

8. An electronic apparatus comprising the electro-optical device according to Claim 7.

8. A method for manufacturing an electron emitter comprising:

defining a pair of spaced apart electrode-forming regions on a substrate;

defining a conductive layer-forming region on the substrate, the conductive layer-forming region interconnecting the electrode-forming regions;

forming a bank encircling the electrode-forming regions and the conductive layer-forming region;

discharging first droplets toward the electrode-forming regions to form a pair of element electrodes; and

discharging second droplets toward the conductive layer-forming regions to

form a conductive layer connecting the element electrodes to each other.

9. The method of claim 8 further comprising treating a portion of the conductive layer to form an electron-emitting section.

10. The method of claim 8 further comprising removing the bank after the conductive layer and element electrodes are formed.

11. The method of claim 8 further comprising rendering the bank lyophobic.

12. The method of claim 8 further comprising rendering at least one of:
the electrode-forming regions; and
the conductive layer-forming region;
lyophilic.